



DEUTSCHES
PATENTAMT

②1 Aktenzeichen: P 39 38 823.9
②2 Anmeldetag: 23. 11. 89
④3 Offenlegungstag: 29. 5. 91

14

DE 39 38 823 A 1

⑦1 Anmelder:
Miele & Cie GmbH & Co, 4830 Gütersloh, DE

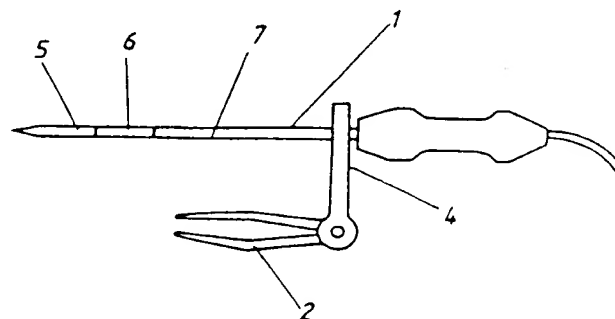
⑦2 Erfinder:
Bock, Ernst-Heinrich, 2370 Rendsburg, DE

⑤4 Steuereinrichtung für Backvorgänge

Mit einer Steuereinrichtung für den Backvorgang soll erreicht werden, daß der Backprozeß bei Erreichen vorgegebener Randbedingungen vollautomatisch gesteuert bzw. abgebrochen wird.

Bei der erfindungsgemäßen Steuereinrichtung wird die Erkenntnis zugrundegelegt, daß jedes Backgut zum Ende des Backvorganges eine bestimmte Restfeuchtigkeit aufweist. Bei Erreichen einer vorgegebenen Restfeuchtigkeit wird der Backvorgang abgebrochen.

Zur Restfeuchtemessung weist das Fühlerelement (1) zwei Pole (5, 7) auf, die unter Zwischenlage eines Isolierstücks (6) angeordnet sind. An dem Fühlerelement (1) ist ein Vorwiderstand vorgeschaltet. Aus dem Verhältnis der Spannung am Vorwiderstand und am Fühlerelement wird der Widerstand und damit die Restfeuchtigkeit des Backgutes berechnet.



DE 39 38 823 A 1

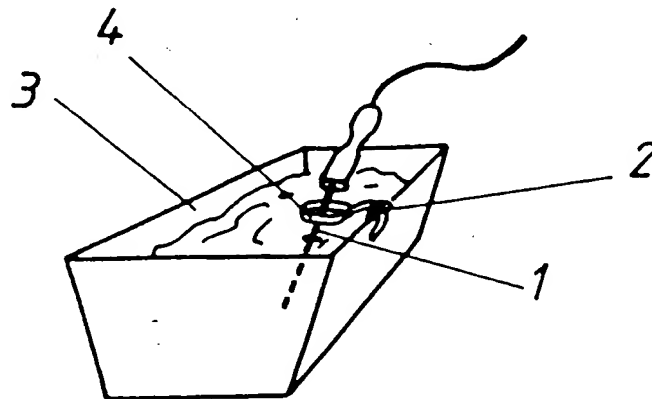


Fig. 1

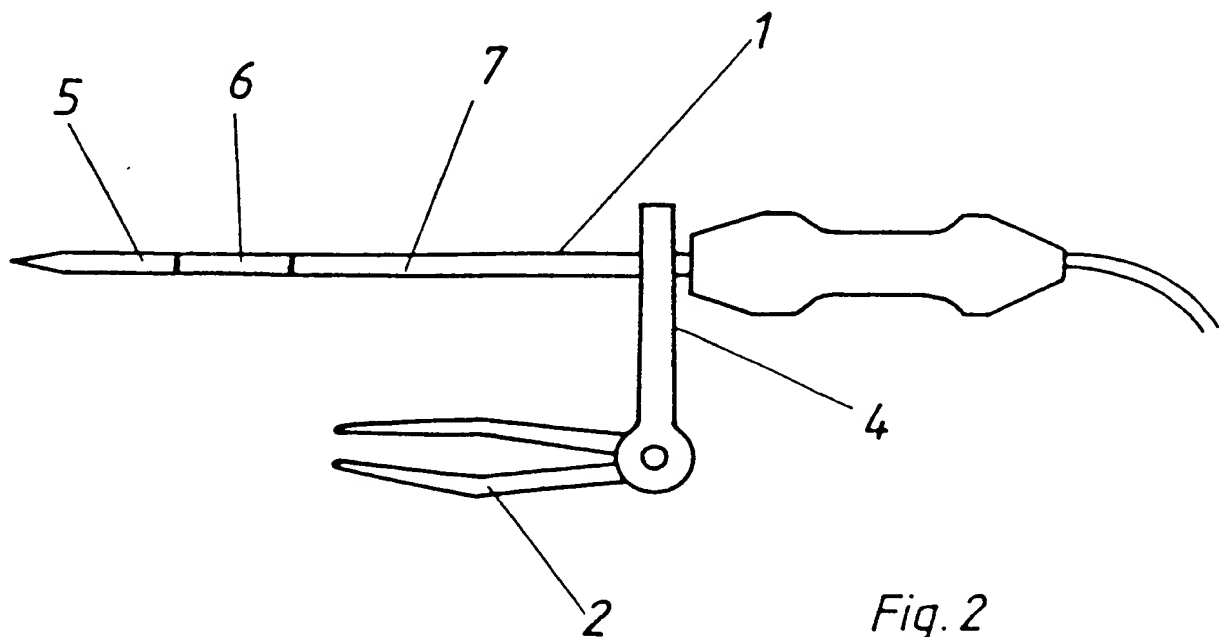


Fig. 2

===== EPODOC =====

- TI - Control device for baking - in which baking is stopped when residual moisture content of item being baked falls to specific predetermined level
- AB - A probe (1) for controlling baking processes is in the form of a conductivity sensor which regulates the process in relation to the changes in electrical resistance of the item being cooked. This probe provides a measure of the residual moisture content of the item, and is fitted with an input device for accepting a pre-determined residual moisture content level.
- Pref. a clamp (2) attaches the probe (1) to the side of the baking tin. The probe itself consists of two conducting sections (5,7) separated by an insulating section (6). The electrical resistance between the sections (5,7), when the probe is in position in an item being cooked, is used as a measure of the residual moisture content of the item.
- USE/ADVANTAGE - This invention is intended for use in controlling cooking processes independently of the temperature of the item being cooked. Cooking ceases when the residual moisture content in the item falls to a certain predetermined level, which varies for different products and processes and is input manually into the device as required.
- PN - DE3938823 A 19910529
- AP - DE19893938823 19891123
- PR - DE19893938823 19891123
- PA - MIELE & CIE (DE)
- IN - BOCK ERNST-HEINRICH (DE)
- EC - G01N27/04B ; G01N33/02
- DT - *

===== WPI =====

- TI - Control device for baking - in which baking is stopped when residual moisture content of item being baked falls to specific predetermined level
- AB - DE3938823 A probe (1) for controlling baking processes is in the form of a conductivity sensor which regulates the process in relation to the changes in electrical resistance of the item being cooked. This probe provides a measure of the residual moisture content of the item, and is fitted with an input device for accepting a pre-determined residual moisture content level.
- Pref. a clamp (2) attaches the probe (1) to the side of the baking tin. The probe itself consists of two conducting sections (5,7) separated by an insulating section (6). The electrical resistance between the sections (5,7), when the probe is in position in an item being cooked, is used as a measure of the residual moisture content of the item.
- USE/ADVANTAGE - This invention is intended for use in controlling cooking processes independently of the temperature of the item being cooked. Cooking ceases when the residual moisture content in the item falls to a certain predetermined level, which varies for different products and processes and is input manually into the device as required. (2pp Dwg.No.2/2)
- PN - DE3938823 A 19910529 DW199123 000pp
- PR - DE19893938823 19891123
- PA - (MIEL) MIELE & CIE & CO GM
- IN - BOCK E H
- MC - D03-K01
- S03-E02 X25-P01 X27-C
- DC - D11 Q74 S03 X25 X27
- IC - A21B1/40 ; F24C15/00 ; G01N27/10
- AN - 1991-164994 [23]